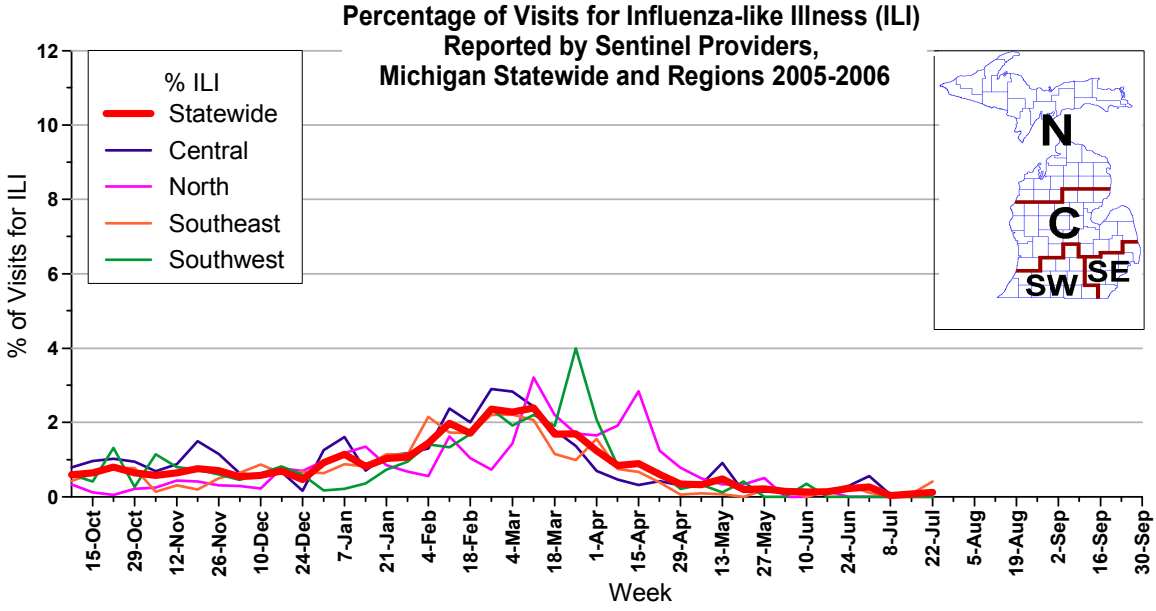
MIFluFocus
July 27, 2006
Weekly Influenza Surveillance and Avian Influenza Update

Syndromic Surveillance System Surveillance: Flu-like illness, as characterized by the syndromic surveillance systems, continues to demonstrate a very low overall level of activity. Flu-like illness reporting through the Michigan Disease Surveillance System has been negligible in recent weeks, as schools are closed for the summer. Over-the-counter pharmaceutical sales have been stable or decreasing for all flu-related products recently and the sales of all products (except for chest rubs) are at or below levels from last year at this time. No statewide alerts for increased respiratory or constitutional emergency department visits have been generated in recent weeks.

Sentinel Surveillance (**as of July 27, 2006**): During the week ending July 22, 2006, the proportion of visits due to influenza-like illness (ILI) remained relatively unchanged from last week at 0.1% of all visits. Low levels of ILI activity were reported in all regions; the percentage of visits due to ILI by region was 0.1%, Central; 0.0%, North; 0.4%, Southeast; and 0.0%, Southwest.



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend year-round participation from all sentinel providers. Data that we obtain over the summer will help us to establish a baseline level of activity during months that are not typically associated with high levels of influenza activity. New practices are encouraged to join influenza sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of July 19, 2006): Results on six samples (all taken in March 2006) that were sent to the CDC for strain typing revealed A/Wisconsin/67/2005-like virus, which is an H3N2 influenza A virus. An A/Wisconsin/67/2005-like virus was recommended by WHO as the H3 component for the 2006-2007 Northern Hemisphere vaccine formulation. The MDCH laboratory has confirmed 138 influenza cases in Michigan over the 2005-2006 season, of which 132 were influenza A (H3N2) and 6 were influenza B.

Influenza-Associated Pediatric Mortality (as of July 20, 2006, CDC data as of May 20): Results received from the CDC on July 24th regarding an ongoing investigation of a pediatric death from Michigan showed no evidence of influenza A or B or respiratory syncytical virus on immunohistochemistry tests. Thus, for the 2005-2006 influenza season, Michigan had one confirmed influenza-associated pediatric

death from region 2S. During October 2, 2005 – May 20, 2006, CDC received reports of 35 influenza-associated pediatric deaths, 33 of which occurred during the current influenza season.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of July 20, 2006): No reports were received during the past reporting week. A total of two congregate setting outbreaks have been reported to MDCH this season; one in Southwest Michigan in late February and one in Southeast Michigan in late March. Both outbreaks were MDCH laboratory confirmed as due to influenza A (H3N2).

The 2005-2006 Michigan Influenza Seasonal Summary is now available at http://www.michigan.gov/flu under "Seasonal Influenza – MDCH Laboratory Influenza Testing and Surveillance." Overall, this season was milder than the previous year, peaked in early to mid-March and was comprised mainly of influenza A infections.

National (June 29, 2006): The CDC's 2005-2006 Influenza Season Summary can now be found online at http://www.cdc.gov/flu/weekly/weeklyarchives2005-2006/05-06summary.htm. Highlights from the summary were previously mentioned in the June 15, 2006 issue of the MI FluFocus report.

International (WHO, as of July 14, 2006): During weeks 23–26, with the exception of Hong Kong Special Administrative Region of China and South Africa, where high levels of influenza activity were reported, overall influenza activity in both northern and southern hemispheres was low. In the Hong Kong Special Administrative Region of China, influenza A(H1N1) virus has been circulating since the first week of 2006, jointly with B virus until week 11 and then predominating. During week 23, A(H1N1) activity started to increase and during week 26, high level activity was noted. New Zealand reported an increase in A(H3N2) activity since week 23. Influenza activity was reported as regional during week 26. Influenza A(H3N2) activity in South Africa was reported as widespread during weeks 23–24, then declined rapidly and was reported as sporadic during week 26. During weeks 23–26, low influenza activity was reported in Argentina (H1, H3 and B), Canada (A and B), Chile (H1, H3 and B), Islamic Republic of Iran (H3 and B), Japan (H1 and B), Madagascar (H1), Mexico (A and B), New Caledonia (A) and Uruguay (A). Mongolia, Portugal, Senegal and Slovenia reported no influenza activity.

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Weekly influenza activity reporting to the CDC is finished for the 2005-2006 influenza season.

End of Seasonal Report

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Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.

International Update (Agence France-Presse , July 21; OIE, July 24 and WHO, July 26): China has announced it had killed nearly 400,000 chickens in the far northwest of the country to control a fresh outbreak of bird flu. The outbreak was discovered July 14th in Aksu city, Xinjiang region, when 3045 chickens were found dead, the agriculture ministry said in a brief statement on its website on July 21st. Since then 356,976 chickens have been killed as part of emergency measures to contain the outbreak, according to the statement. "The epidemic is effectively under control," it said. There was no mention of

any concerns for people living in the area. The outbreak is the 37th reported among poultry in China since October 2005. Of the 19 people confirmed to have contracted the H5N1 virus in China, 12 have died.

Thailand's Ministry of Agriculture and Cooperatives is reporting an outbreak of highly pathogenic avian influenza (HPAI) virus subtype H5 that started on July 16th in the BangMulnarg district (Pichitr province). There were 31 dead native chicken and 295 susceptible animals. The diagnosis has been made by the Lower Northern Regional Veterinary Research and Development Centre (Department of Livestock Development, Pitsanuloke province) using RT-PCR(1) test. The last reported outbreak of HPAI in poultry in Thailand was in November of 2005. Control measures undertaken include stamping out, quarantine, movement control inside the country, screening, zoning, and disinfection of the affected premises. The outbreak was found during an active surveillance program in progress since June 1, 2006, the second to take place in 2006 in high risk areas. Pichitr Provincial Livestock Office has declared the whole BangMulnarg district as an HPAI infected area, which allows the authorities of the Department of Livestock Development to conduct a full scale of disease control measures.

The Ministry of Public Health in Thailand has confirmed a case of human infection with H5N1 avian influenza. The patient, a 17-year-old man from Thap Khlo district of Phichit province in the north, developed symptoms on July 15th, was hospitalized on July 20th and died on July 24th. On July 10th, the young man had buried the carcasses of dead chickens. This case coincides with a recurrence of a confirmed H5N1 outbreak in animals in the province. Control measures have been implemented to contain the animal outbreak and human surveillance has been strengthened. Field investigations have not found any indications of respiratory illness in close contacts of the young man. This is the first human case of H5N1 infection reported from Thailand in 2006.

National Update (HHS, July 20, 2006): HHS Secretary Mike Leavitt today announced a contract award with GlaxoSmithKline (GSK) to provide zanamivir (Relenza®) to all 50 states, the District of Columbia, five U.S. territories and three Freely Associated States of the Pacific at a federally subsidized price. The contract will run for a period of two years with an initial contract award amount of $16,833,000. Under the HHS contract, 59 jurisdictions will be able to purchase at federally negotiated price from GSK and will receive a 25 percent federal subsidy for a prescribed number of treatment courses. A complete table of projected antiviral purchases and subsidized allocations for all jurisdictions is posted online at http://www.pandemicflu.gov/state/antivirals.html. The contract allows states to purchase up to 15.5 million antiviral treatment courses as part of the HHS program to assure that the country has stockpiles to cover at least 25 percent of the U.S. population. The jurisdictions' part of the overall stockpile program, as outlined in the online allocation table, totals 31 million treatment courses. In addition to these 31 million federally-subsidized, state-purchased treatment courses of antiviral drugs -- which will reside in the states -- the federal government will purchase 44 million antiviral treatment courses for state use which will be stored in the Strategic National Stockpile.

National Wild Bird Surveillance (July 20, 2006): The weekly report from the U.S. Fish and Wildlife Service in Anchorage, Alaska indicated that 591 cloacal samples collected by FWS were shipped to the National Wildlife Heath Center from the Alaska Science Center this week. Shipped samples were collected through the live bird sampling. Samples from the YK Delta were collected from grey-cheeked thrush, eastern yellow wagtails, western sandpipers, black brant, spectacled eiders, common eiders, and emperor geese. Other samples were collected from glaucous gulls on the North Slope. 757 analytical results from FWS samples were received from NWHC this week. Three were AI positive, but none of the samples tested positive for the H5 subtype. To date, FWS Region 7 has received analytical results from the NWHC on 4,952 samples. Of these, 69 have tested positive for AI virus. Nine samples have tested positive for the H5 subtype – no sample has tested positive for H5N1. One sample was an LPAI H5N2. 26 projects are in the field this week. Three project were cancelled due to logistical and biological (no breeding birds) problems.

Michigan Wild Bird Surveillance: To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at http://www.michigan.gov/emergingdiseases

Table 1. H5N1 Influenza in Poultry (Outbreaks up to July 13, 2006)
(Source: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 7/13/2006)

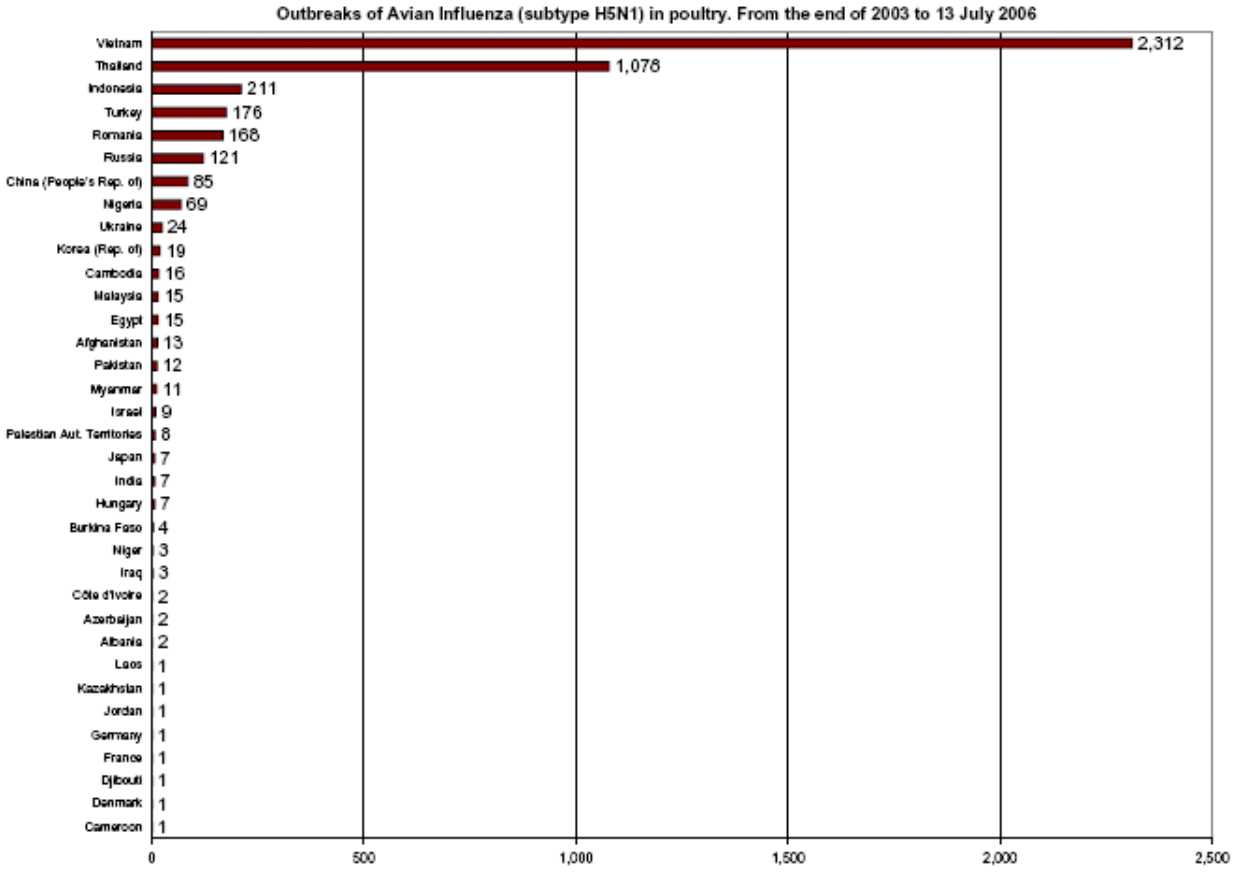

Table 2. H5N1 Influenza in Humans (Cases up to July 26, 2006)
(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2006_06_06/en/index.html Downloaded 7/26/2006)
Cumulative number of confirmed human cases of Avian Influenza A(H5N1) reported to WHO. The total number of cases includes number of deaths. WHO only reports laboratory-confirmed cases.

Country	2003		2004		2005		2006		Total	
	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths
Azerbaijan	0	0	0	0	0	0	8	5	8	5
Cambodia	0	0	0	0	4	4	2	2	6	6
China	0	0	0	0	8	5	11	7	19	12
Djibouti	0	0	0	0	0	0	1	0	1	0
Egypt	0	0	0	0	0	0	14	6	14	6
Indonesia	0	0	0	0	17	11	37	31	54	42
Iraq	0	0	0	0	0	0	2	2	2	2
Thailand	0	0	17	12	5	2	1	1	23	15
Turkey	0	0	0	0	0	0	12	4	12	4
Viet Nam	3	3	29	20	61	19	0	0	93	42
Total	3	3	46	32	95	41	88	58	232	134